TOPOGRAPHIC PRODUCTION CAPABILITY (TPC) FAMILY OF SYSTEMS (FOS)

DESCRIPTION

The Topographic Production Capability (TPC) is the only Marine Corps' Family of Systems (FoS) that provides an integrated, independently deployed, self-contained Geospatial Information System designed for data acquisition, manipulation, analysis and dissemination. It provides the commanders and staffs with Geospatial Intelligence (GEOINT) support to all levels of the Marine Air Ground Task Force (MAGTF).

The TPC FoS provides the capability to task, collect, process, exploit, analyze, produce, store, and disseminate all-source GEOINT information as a foundation for the Common Operational Picture/Common Tactical Picture for the MAGTF. TPC provides an extensive reach-back functionality to intelligence agencies (National Geospatial Agency, Central Intelligence Agency, Defense Intelligence Agency), as well as reach-back to the Marine Corps Intelligence Activity (MCIA). TPC also enables reach-back to its parent Topographic Platoon, theater Joint Intelligence Centers, and Joint Analysis Centers for specialized capabilities (i.e., data extraction) in addition to collaborative analysis and/or production.

The TPC FoS provides critical, timely, and accurate digital and hardcopy GEO-INT to support mission planning and execution. The TPC FoS provides a flexible and extensible data management framework to support the capturing of both unstructured and structured GEOINT data that will allow data to be organized and "tagged" for later use in data interop-

erability, data discovery and data fusion.

The TPC FoS consists of the Marine Corps Geospatial Information Library (MCGIL), Tactical Geospatial Information Library (TGIL), the Deployable Geospatial Information Library Server (DGIL/S), the Deployable Geospatial Information Library Workstation (DGIL/W), the Digital Terrain Analysis Mapping System (DTAMS), the Digital Terrain Analysis Mapping System – Light (DTAMS-L) and the Geodetic Survey Set (GSS).

The TPC FoS requires amphibious task force afloat connectivity when deployed with a Marine Expeditionary Unit (MEU) or a Marine Expeditionary Brigade afloat.

OPERATIONAL IMPACT

The TPC FoS is the only tactical system in the Marine Corps inventory, which satisfies the Marine Corps GEOINT requirements across the doctrine, organization, training, material, leadership, personnel and facilities spectrum. The TPC FoS is used by the Topographic Platoon of the Marine Expeditionary Force (MEF), providing deployable modules to the Major Subordinate Commands and the MEU. It may also be used to support the Commander, Joint Task Force or Marine Component Commander.

The TPC FoS provides the capability to scale up or down, depending on the type of mission, size of the force along with specified geospatial requirements. The TPC FoS is a transportable, highly mobile, modularized network of systems

that allows the commander to exercise near real-time control, coordination and direction of MAGTF geospatial and geographic intelligence production operations. The TPC FoS supports the following:

TPC FoS facilitates the Marine Corps concept of Expeditionary Maneuver Warfare by providing Commanders/Squad leaders improved battlespace visualization and common understanding.

TPC FoS supports the transition to irregular warfare by helping to build tailored made products of cities that readily identify religious, historical and cultural landmarks. Additionally TPC FoS supports Distributed Operations by building tailored made products for individual teams.

The employment of TPC FoS in Operation Iraqi Freedom and Operation Enduring Freedom continues to grow exponentially by providing tailored made geospatial products of cities, areas of operation and road networks to squad leaders up to the MEF Commanding General.

TPC FoS is completely interoperable with other Marine Corps systems, other services and Commonwealth forces.

TPC FoS supports all phases of Operational Maneuver from the Sea, Sustained Operations Ashore, Ship-To-Objective Maneuver and other Expeditionary Operations.

PROGRAM STATUS

The TPC FoS has been fielded to I, II, III MEFs, MCIA and the School of Geospatial-Intelligence. Additionally, TPC FoS components have been assigned to

each of the Marine Divisions, the Marine Logistics Groups, the Chemical Biological Incident Response Force in Indian Head, MD, and the Marine Corps Special Operations Command, TPC FoS has been designated as an Acquisition Category IV(M) Program and is post Milestone "C," meaning it is in the production and deployment phase by finalizing the 19 DTAMS-L in the inventory. The TPC FoS program office has satisfied the Urgent Universal Need Statement requirement by completing the fielding of 17 DTAMS-L to the Operational Forces in the 3rd Ouarter (Otr) of fiscal year 2007. The current fielded systems will be refreshed during fiscal year 2008, enhancing the current residential capability.

Procurement Profile:	FY2008	FY2009
Quantity:		
TGIL	0	0
DGIL-S	0	0
DGIL-W	0	0
DTAMS	0	0
DTAMS-L	19	0
GSS	0	0

Developer/Manufacturer: Optia, Dell

Hardware/Software Integrator: Northrop Grumman Information Technology, TASC, Chantilly, VA